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1. A semiconductor device, comprising:

semiconductor material;

photosensitive elements located on said semiconductor material; and

transparent plastic material covering said photosensitive elements.

2. The semiconductor device of claim 1, wherein said photosensitive elements are arranged in a two-dimensional array.

3. The semiconductor device of claim 2, wherein said transparent plastic material includes injection molded epoxy resin.

4. The semiconductor device of claim 3, further comprising leads connected to said semiconductor material, said leads being partially encapsulated in said transparent plastic material.

5. The semiconductor device of claim 3, wherein said transparent plastic material includes a color filter.

6. The semiconductor device of claim 3, further comprising a color filter surrounded by said transparent plastic material.

7. An imaging device, comprising:

a package formed of transparent plastic material;

a semiconductor chip located within said package, said chip including an array of photosensitive elements for receiving an image and for generating corresponding signals, said photosensitive elements being covered by said transparent plastic material.

8. The imaging device of claim 7, wherein said package includes a lens for transmitting the image onto said photosensitive elements, said lens being formed of said transparent plastic material.

9. The imaging device of claim 7, wherein said package includes a color filter, said filter being formed of said transparent plastic material.

10. The imaging device of claim 7, further comprising a color filter array molded into said transparent plastic material.

11. An imaging system, comprising:

an image source for transmitting an image;

a first semiconductor device for receiving the image and for generating corresponding signals; and

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5 *Sub A3*
a first package for protecting and supporting said semiconductor device,
said package being formed of transparent plastic material, said plastic material
including injection molded resin for transmitting an image from said image
source onto said first semiconductor device.

10 12. The system of claim 11, wherein said image source includes a lens.

15 *Sub A4*
13. The system of claim 11, further comprising second and third
semiconductor devices, and second and third packages for protecting and
supporting said second and third semiconductor devices, said second and third
packages including injection molded resin, and wherein said image source is
arranged to simultaneously transmit the image onto said first, second and third
20 semiconductor devices, and wherein said first, second and third semiconductor
devices include complementary color filters:

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14. The system of claim 13, wherein said complementary color filters are
molded into said first, second and third packages.

30 15. The system of claim 13, wherein said first, second and third packages
include red, green and blue filters.

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16. The system of claim 13, wherein said first, second and third packages include cyan, magenta and yellow filters.

17. A method of making an imaging device, comprising the steps of:

locating a semiconductor device in a mold, said device including an integrated circuit and photosensitive elements;

injecting transparent resin into said mold such that said integrated circuit and said photosensitive elements are covered by said transparent resin; and subsequently, removing said semiconductor device from said mold.

18. The method of claim 17 further comprising the steps of applying a release agent to said mold, wherein said step of applying a release agent occurs prior to said step of injecting said transparent resin into said mold.

19. The method of claim 17, further comprising the steps of attaching leads to said semiconductor device, said leads being partially encapsulated in said transparent resin.

20. The method of claim 19, wherein said transparent resin is a thermosetting resin, and further comprising the step of curing said thermosetting resin to form a package encapsulating said semiconductor device.

21. The method of claim 20, wherein said curing step includes the step of forming a lens in said package.

22. The method of claim 20, further comprising the step of providing a color filter in said transparent resin.

23. The method of claim 22, wherein said color filter is formed by providing said transparent resin with a color.

24. The method of claim 22, wherein said color filter is a color filter array, and wherein said color filter array is located in said mold prior to said step of injecting transparent resin into said mold.

25. A method of making an imaging device, comprising the steps of:
locating leads and bond pads in a mold;
injecting transparent resin into said mold such that inner ends of said leads are encapsulated in said resin;
curing said resin;
subsequently, bump bonding a semiconductor device to said bond pads.

26. The method of claim 25, wherein said semiconductor device includes photosensitive elements. *a*

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27. The method of claim 26, wherein said resin is a clear epoxy resin.

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28. An imaging device, comprising:

a package formed of a housing and a transparent plastic cover;

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a semiconductor chip located within said package, said chip including an array of photosensitive elements for receiving an image and for generating corresponding signals, said photosensitive elements being covered by said transparent plastic cover.

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29. The device of claim 28, wherein said transparent plastic cover includes a color filter.

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30. The device of claim 28, wherein said housing is formed of ceramic material.

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31. The device of claim 28, wherein said housing is formed of molded plastic.

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